AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) An aviation gasoline composition possessing a high motor octane number and containing reduced amounts of tetraethyl lead comprising: about 20 to about 80 vol% iso-octane, about 5 to about 18 vol% toluene, about 1 to about 20 vol% C_4 to C_5 paraffins, greater than 0 to about 1 ml tetraethyl lead/gallon of said aviation gasoline composition and the balance being ~~comprising~~ light alkylate produced in an alkylation unit using hydrogen fluoride or H_2SO_4 as a catalyst.
2. (Original) The aviation gasoline composition of claim 1, wherein the motor octane number is at least about 98.
3. (Original) The aviation gasoline composition of claim 1, wherein the motor octane number is at least about 100.
4. (Original) The aviation gasoline composition of claim 1, comprising about 30 to about 70 vol% iso-octane.
5. (Original) The aviation gasoline composition of claim 1, comprising about 40 to about 60 vol% iso-octane.
6. (Currently Amended) A method of preparing an aviation gasoline blend ~~composition~~ possessing a high motor octane number and containing reduced amounts of tetraethyl lead comprising:
   a) providing an aviation gasoline comprising toluene, C_4 to C_5 paraffins, tetraethyl lead, and light alkylate produced in an alkylation unit using hydrogen fluoride or H_2SO_4 as a catalyst; and
   b) blending the aviation gasoline with iso-octane; and
   c) isolating an aviation gasoline blend comprising about 20 to about 80 vol% iso-octane, about 5 to about 18 vol% toluene, about 1 to about 20 vol% C_4 to C_5 paraffins, greater than 0 to about 1 ml tetraethyl lead/gallon of ~~said~~

aviation gasoline blend, ~~composition~~ and the balance being the ~~comprising~~ light alkylate.

7. (Currently Amended) The method of claim 6, wherein the motor octane number of the aviation gasoline blend is at least about 98.

8. (Currently Amended) The method of claim 6, wherein the motor octane number of the aviation gasoline blend is at least about 100.

9. (Currently Amended) The method of claim 6, wherein the aviation gasoline blend comprises ~~comprising~~ about 30 to about 70 vol% iso-octane.

10. (Currently Amended) The method of claim 6, wherein the aviation gasoline blend comprises ~~comprising~~ about 40 to about 60 vol% iso-octane.

11. (Currently Amended) A method for operating an aircraft having a spark-ignited internal combustion engine, comprising:

a) introducing the aviation gasoline composition of claim 1 into the engine; and [[engine, and,]]

b) combusting the aviation gasoline composition in the engine.

12. (Currently Amended) The method of claim 11, wherein the motor octane number of the aviation gasoline composition is at least about 98.

13. (Currently Amended) The method of claim 11, wherein the motor octane number of the aviation gasoline composition is at least about 100.

14. (Currently Amended) The method of claim 11, wherein the aviation gasoline blend composition comprises ~~comprising~~ about 30 to about 70 vol% iso-octane.

15. (Currently Amended) The method of claim 11, wherein the aviation gasoline composition comprises ~~comprising~~ about 40 to about 60 vol% iso-octane.

16. (Currently Amended) A method of preparing a reduced lead content aviation gasoline blend ~~composition~~ while maintaining a high motor octane number comprising:[[,]]

a) providing an aviation gasoline comprising toluene, C_4 to C_5 paraffins, tetraethyl lead, and light alkylate produced in an alkylation unit using hydrogen fluoride or H_2SO_4 as a catalyst; and

b) blending the [[an]] aviation gasoline ~~composition~~ with iso-octane[[,]] and toluene; and [[and, optionally, toluene,]]

c) isolating a ~~wherein, the~~ reduced lead content aviation gasoline blend comprising ~~composition comprises~~ about 20 to about 80 vol% iso-octane, about 5 to about 18 vol% toluene, about 1 to about 20 vol% C_4 to C_5 paraffins, greater than 0 to about 1 ml tetraethyl lead/gallon of ~~said~~ reduced lead content aviation gasoline blend, ~~composition~~ and the balance being the ~~comprising~~ light alkylate.

17. (Currently Amended) The method of claim 16, wherein the motor octane number of the reduced lead content aviation gasoline blend is at least about 98.

18. (Currently Amended) The method of claim 16, wherein the motor octane number of the reduced lead content aviation gasoline blend is at least about 100.

19. (Currently Amended) The method of claim 16, wherein the reduced lead content aviation gasoline blend comprises about 30 to about 70 vol% iso-octane.

20. (Currently Amended) The method of claim 16, wherein the reduced lead content aviation gasoline blend comprises about 40 to about 60 vol% iso-octane.

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Previously Presented) The aviation gasoline composition according to claim 1, wherein said aviation gasoline composition is substantially free of ether compounds.

27. (Currently Amended) The method of claim 6, wherein said aviation gasoline blend ~~composition~~ is substantially free of ether compounds.

28. (Previously Presented) The method of claim 11, wherein said aviation gasoline composition is substantially free of ether compounds.

29. (Currently Amended) The method of claim 16, wherein the reduced lead content ~~said~~ aviation gasoline blend ~~composition~~ is substantially free of ether compounds.

30. (New) The aviation gasoline blend according to claim 1, wherein the alkylation unit is in an oil refinery.

31. (New) The method of claim 6, wherein the alkylation unit is in an oil refinery.

32. (New) The method of claim 16, wherein the alkylation unit is in an oil refinery.

33. (New) An aviation gasoline blend possessing a high motor octane number and containing reduced amounts of tetraethyl lead comprising:

a) iso-octane; and

b) an aviation gasoline comprising toluene, C_4 to C_5 paraffins, tetraethyl lead, and light alkylate produced in an alkylation unit in an oil refinery;

wherein the aviation gasoline blend comprises about 20 to about 80 vol% iso-octane, about 5 to about 18 vol% toluene, about 1 to about 20 vol% C_4 to C_5 paraffins, greater than 0 to about 1 ml tetraethyl lead/gallon of aviation gasoline blend, and the balance being the light alkylate.

34. (New) An aviation gasoline blend possessing a high motor octane number and containing reduced amounts of tetraethyl lead comprising:

a) iso-octane; and

b) an aviation gasoline comprising toluene, C_4 to C_5 paraffins, tetraethyl lead, and light alkylate produced in an alkylation unit using hydrogen fluoride or H_2SO_4 as a catalyst;

wherein the aviation gasoline blend comprises about 20 to about 80 vol% iso-octane, about 5 to about 18 vol% toluene, about 1 to about 20 vol% C_4 to C_5 paraffins, greater than 0 to about 1 ml tetraethyl lead/gallon of aviation gasoline blend, and the balance being the light alkylate.